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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/944,032	08/30/2001	Bradley Stephen Sonksen	ENTRDA.0021P	5575

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EXAMINER	
CHEA, PHILIP J	
ART UNIT	**PAPER NUMBER**
2153	

DATE MAILED: 10/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/944,032	SONKSEN, BRADLEY STEPHEN	
	Examiner	Art Unit	
	Philip J. Chea	2153	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *30 August 2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-25* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-25* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *30 August 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claims 1-25 have been examined.

Claim Objections

1. Claims 1-12, are objected to because of the following informalities:

As per claim 1, the word "received" in line 3 is apparently "receive".

As per claim 2, the word "received" in line 3 is apparently "receive".

Any claim not specifically mentioned is objected by virtue of being dependent on an objected claim.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-12,14-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

4. Claim 1 recites the limitation "the output" in lines 3 and 4. There is insufficient antecedent basis for this limitation in the claim.

5. Claim 6 recites the limitation "the output" in line 3. There is insufficient antecedent basis for this limitation in the claim.

6. Claim 6 recites the limitation "the output" in line 5. There is insufficient antecedent basis for this limitation in the claim.

7. Claim 6 recites the limitation "the modified output" in lines 7 and 8. There is insufficient antecedent basis for this limitation in the claim.

8. Claim 6 recites the limitation "the output" in line 10. There is insufficient antecedent basis for this limitation in the claim.

9. Claims 14-17 recites the limitation "The system" in line 1. There is insufficient antecedent basis for this limitation in the claim. The Examiner interprets the claims to read "The method".

10. Any claim not specifically mentioned is rejected by virtue of being dependent on a rejected claim.

Claim Rejections - 35 USC § 102

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

12. Claims 1-25 are rejected under 35 U.S.C. 102(b) as being anticipated by Ogawa et al. (US 5,802,065).

As per claim 1, Ogawa discloses a system for performing a modification to a packet comprising:

a first memory configured to receive data comprising a portion of the packet (see column 7, lines 1-15);

one or more data modification units configured to receive and modify the output of the first memory to create modified data (see column 7, lines 1-15, where pipeline is used for modification);

a second memory configured to receive the modified data from the data modification unit (see column 7, lines 1-15, where modified data from the pipeline goes to a capture register circuit).

As per claim 2, Ogawa further discloses that the first and second memory comprise registers (see column 7, lines 1-15).

As per claim 3, Ogawa further discloses a control system configured to determine when to perform a modification on the data passing between the first memory and the second memory (see Fig. 2); and

logic configured to perform a modification on the data passing between the first memory and the second memory (see Fig. 4).

As per claim 4, Ogawa further discloses that the control system includes a counter to determine an offset from the start of the packet at which the logic will perform a modification (see Fig. 4).

As per claim 5, Ogawa further discloses that the modification comprises a modification to a time to live field, a type of service field, or a checksum field (see column 19, lines 11-21, where the modification is implied, if not inherent, when a packet completes a hop).

As per claim 6, Ogawa discloses a system for modifying a portion of a packet comprising:

a first set of one or more data selectors connected to receive the output of at least one of the two or more storage locations (see Fig. 2 [22B]);

one or more data modifiers connected to receive the output of at least one of the first set of one or more data selectors and configured to create modified data (see Fig. 2 [22A]);

a second set of one or more data selectors connected to receive the modified output of at least one of the one or more modifiers (see Fig. 2 [23A]); and

a second data storage having two or more storage locations and the second data storage is configured to store the output of at least one of the second set of one or more data selectors (see Fig. 3 [24A]).

As per claim 7, Ogawa further discloses that the first set of one or more data selectors is configured to direct the data from any one of the two or more storage locations of the first data storage to any of the one or more data modifiers and the second set of one or more data selectors is configured to direct the modified data to any of the two or more locations of the second data storage (see Figs. 2 and 3).

As per claim 8, Ogawa further discloses that the first data storage and second data storage comprises a four byte register and each storage location is one byte in size (see column 8, lines 37-42 and columns 18 and 19, lines 62-67 and 1-3)

As per claim 9, Ogawa further discloses that the data selectors comprise multiplexors (see Fig. 2 [23A]).

As per claim 10, Ogawa further discloses a control system configured to determine when the data modifiers modify the data received from the first set of one or more data selectors (see Fig. 4).

As per claim 11, Ogawa further discloses that the control system is further configured to provide one or more data selector control signals to the first and second set of one or more data selectors to thereby control the routing of data to the data modifier ad the two or more locations of the second data storage (see column 7, lines 5-15).

As per claim 12, Ogawa further discloses that the one or more data modifiers perform modifications consisting of modifications to a time to live value, a type of service value, or a checksum value (see column 19, lines 11-21, where the modification is implied, if not inherent, when a packet completes a hop).

As per claim 13, Ogawa discloses a method for modifying data contained in one or more fields in a packet header or packet tag that is passing through a processing pipeline comprising:

selectively directing data to a modification unit (see column 7, lines 1-15);

selectively modifying the data based on control signals, the control signals determining when the modifiers will modify data (see column 7, lines 1-15);

outputting modified data from the modification unit to a subsequent portion of the processing pipeline (see column 7, lines 1-15).

As per claim 14, Ogawa further discloses that the modification unit comprises hardwired logic configured to modify the data (see Figs 2 and 3).

As per claim 15, Ogawa further discloses that outputting modified data comprises providing the modified data to a register location (see Fig. 3 [24A]).

As per claim 16, Ogawa further discloses the step of providing control signals to the modification unit to control what modification the modification unit will perform (see column 7, lines 1-15).

As per claim 17, Ogawa further discloses incrementing a counter, having an output, with the passage of data to the modification unit and providing the counter output to the modification unit to control when to perform a modification on data (see Fig. 4).

As per claim 18, Ogawa further discloses that the method of modifying the data may occur at any location in the packet (see column 13, line 41 – column 15, line 48).

As per claim 19, Ogawa further discloses a method for selectively modifying a portion of a packet as portions of the packet pass through a packet processing system:

analyzing the packet to determine processing instructions for the packet (see column 7, lines 1-15);

storing the processing instructions in a first memory (see column 7, lines 1-15);

loading a portion of a packet into a processing module (see column 7, lines 1-15);

providing control instructions to the processing module (see column 7, lines 1-15);

processing the portion of the packet with the processing module to create a modified portion of the packet (see column 7, lines 1-15);

outputting the modified portion from the processing module (see column 7, lines 1-15).

As per claim 20, Ogawa further discloses that processing modifies a portion of the portion of the packet (see column 13, line 41 – column 15, line 48).

As per claim 21, Ogawa further discloses including tracking the number of portions of the packet that have passed through the processing module to thereby control when the processing module will modify a portion of the packet (see column 11, lines 5-15).

As per claim 22, Ogawa further discloses that storing the processing instructions in a first memory occurs at a location defined by a counter output (see column 11, lines 5-15).

As per claim 23, Ogawa further discloses that the processing module performs time to live modification or type of service modification (see column 19, lines 11-21, where the modification is implied, if not inherent, when a packet completes a hop).

As per claim 24, Ogawa further discloses including sequentially passing a plurality of packet portions into the modify unit to generate a running summation of portion values to thereby generate a new checksum value (see column 12, lines 27-33).

As per claim 25, Ogawa further discloses that outputting from the processing module comprises outputting the modified portion to one or more switches and further including (see column 11, lines 26-46); and

selectively switching the modified portion of the packet, wherein the switching may change the order of portions of the packet (see columns 11 and 12, lines 56-67 and 1-3).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Philip J. Chea whose telephone number is 571-272-3951. The examiner can normally be reached on M-F 7:00-4:30 (1st Friday Off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Burgess can be reached on 571-272-3949. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Philip J Chea
Examiner
Art Unit 2153

PJC 9/28/05